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ABSTRACT

The paper is a product of the 3-year project, "Functional Mainstreaming for Success," designed to develop a model for instructional mainstreaming of handicapped children (3-6 years old) in community settings. The literature review focuses on research concerning preschool and early school-age peer tutoring and buddy programs. The review is organized into the following topics: what a peer tutor or buddy is, reasons to use peer tutors and buddies, how to use peer tutors and buddies, the tutor tutee relationship, selection of tutors and buddies, and the training of tutors and buddies. The use of a child's peers is seen to supplement the time a teacher can spend with any one child while also teaching social knowledge and developing friendship skills that an adult teacher can't do. (DB)

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A REVIEW OF PROCEDURES AND ISSUES IN PRESCHOOL PEER TUTORING AND BUDDY SYSTEMS

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Introduction

The use of tutors is probably one of the oldest techniques in educational theorizing. Bausell, Moody, and Walzl (1972) state that tutoring was hypothesized to be superior to other instructional methods and class sizes as long ago as Plato's time. However, the use of peer tutoring and buddy systems, which is a relatively more recent development, can also be seen as having a long, albeit informal, history in this country's educational system. In the one room schoolhouses that possibly our grandparents or maybe even our parents might have known as school, older or more advanced students were commonly called upon to assist another student who needed individualized aid. In such a setting, the students all knew each other closely, and the peer intervention could be seen as coming from an older friend, almost like an older brother or sister. In addition to their role as academic helpers, peers were also counted upon to help a slower or younger child in going out to recess, to the bathroom and in coming and going from home to school and back.

In today's educational system, a renewed interest is being shown in peer tutoring and buddy systems because of the great educational value those systems represent. A meta-analysis of some 65 tutoring programs was reported by Cohen, Kulik, and Kulik, (1982) in which several outcomes were clear. The effect of tutoring programs on academic performance for the tutee were larger in well structured and the more cognitively oriented

programs. Tutoring was seen to produce larger effects in well sequenced "lower level" skills such as math than reading. Tutoring programs of a shorter length had larger student gains. Tutors were seen to have a better understanding yielded of the subject matter in which they served as tutors. Student attitudes towards subject matter were more positive in classrooms with tutoring programs and this effect was shared by both tutor and tutee. However, Gerber and Kauffman 1981 report that somewhat similar findings of the effectiveness of peer tutoring by other studies are seriously flawed methodologically and have inadequate data analysis. Gerber and Kauffman also state that since the rediscovery of peer tutoring coincided with compensatory education programs of the 1960's, many of the anecdotal reports of the success of peer tutoring are suspect and in need of empirical research to determine how much of the effect seen is actually due to peer tutoring. But despite the value and the claimed value of these systems, very little work has been done concerning the use of such techniques at the preschool level. Of course, there are inherent limitation to the extent to which peer tutoring could be implemented with preschool children. A typical preschool child views peers as being cognitively equal and interaction consists of comparing and verifying points of view or knowledge (Musatti, 1986). The ability of a preschool child to entrust another peer is probably limited as a result. Typically, a preschool child is caught up in a constantly changing state of learning and discovery about the word and people around them, all of which seem to the child, to revolve around themselves (Musatti, 1986). But, seemingly, at the same time the preschool child is learning, he or she could be assisting another preschool child to

develop skills in some basic areas that the tutor has already mastered. As previously stated, the extent to which peer tutoring and buddy system could be applied at the preschool level has not been fully explored. The purpose of this review is to present what has been accomplished to date in preschool and early school-age tutoring and to make recommendations as to what could be done to make advantageous use if what we know.

What is a Peer Tutor or Buddy?

Initially, a working definition of a peer tutor or buddy should be stated. A comprehensive, operational definition of either a peer-tutor or a buddy cannot be found in the current literature; consequently, an attempt will be made to do so here. A peer tutor at the preschool level can be seen as a child who is a trainer or teacher to assist a handicapped or nonhandicapped peer in basic academic, structured activities. While a peer-tutor may have authority given by the teacher, a peer-tutor is not authoritarian. A peer-tutor is a friend who has been trained to give academic assistance, to give appropriate prompting and praising, and to model appropriate behavior at all times. Well trained and successful tutors display correct instructional behavior and, in addition, do not forget to be a friend. Before and after, as well as during the time the tutor is assuming a teaching role, the tutor must remember to engage in appropriate interpersonal behaviors such as attending to the tutees personal needs or desires, such as a drink of water or a kleenex.

A peer-buddy, on the other hand, is a child who accompanies and guides a peer in nonacademic, noninstructional activities. A buddy is different

from a tutor in that tutors provide direct training and can assume an authority role as dictated by the teacher if the need arises.

A buddy is an equal and a companion; a tutor is a trainer. However, there are times when a buddy will do some teaching and tutor will be a buddy. The roles are not clear cut absolutes. Buddies can be used for any activity at any time when the product of that activity is not being used to evaluate a child's individualized performance. Possible activities in which to use a buddy might include going to lunch, an assembly, going to class, the bus, recess, and other transitional points in a school day. Buddies could be helpful in group art, music, field trips, story time, or putting on and taking off coats and boots. The possible applications for using buddies could be found only by the practicality and necessity of each particular situation.

Why Use Peer-Tutors and Buddies?

Peer-tutor and buddy systems represent valuable educational tools by allowing teachers more time to use on other activities and by facilitating skill generalization. According to Hartup (1978), peer-tutoring at a school-age level is thought to have three main outcomes. First, it makes advantageous use of the potential existing in peer interactions for productive educational goals. Second, the tutoring situation is purported to benefit both the tutor and the tutee. In most instances, tutoring programs are designed to assist both. Third, peer tutoring provides badly needed assistance to overworked teachers. Rosenshire and Berliner (1978) found that children from 6 to 11 years of age spend at least half of their school day working privately. When a child working privately needs the

teacher's individual attention, the teacher is drawn away from other students and other children needing assistance on their individual work may not receive the help they might need. Jenkins and Jenkins (1982) state that there is correlational evidence that indicates if teachers devote much time to individualized aid, these teachers are less effective overall; presumably because individual attention detracts from time available for other children. Stallings and Kaskowitz (1974) reported that time spent working with one or two other children was negatively related to achievement gains by the class but achievement gain was positively related to the time teachers spend working with small or large groups. Obviously, teachers need methods of supplying individualized aid when it is needed but still be available to assist other students. The use of peer-tutors nicely fills the need. The confirmation of similar findings at a preschool level remains an empirical question.

In addition, some data, although minimal, tend to indicate that adult intervention may distract children from an ongoing interaction and that peer reinforcement can result in greater generalization of skills (Johnson and Johnson, 1972; O'Connor 1972). The use of peers in a preschool setting to teach a word recognition task has been shown to facilitate generalization by providing common stimuli (peers) across settings (Stokes, Dowd, Rowbury and Baer, 1978). Lancioni (1982) hypothesized that, the use of several tutors in the training and administration of reinforcement, and the use of reinforcement contingencies likely to be in effect outside the training setting may facilitate the continued maintenance of the trained response and generalization across individuals and settings. The use of tutors can not

only increase the pool of personnel to assist the teacher in providing individual aid but also fill a different role than that of a classroom teacher by being able to be a common stimuli across multiple settings that the teacher could not do.

There are differences between the performance of somewhat older children in a tutor role relative to a preschool age child acting as a tutor. Mehan (1979) noted the significant change seen in an elementary age child when this child assumed the role of teaching a task to another child. When being taught by the class teacher, this child didn't seem to want to pay attention and participate, and spoke only four times in three hours, only twice using more than one word. However, when this same child was asked to teach another child, a remarkable change was seen. The tutor masteredthe task that seemed difficult or uninteresting before and was able to give complex directions to peers about how to perform the task. The tutor was also seen to be able to use an appropriate, repeatedly firm but non-hostile firmness with one of the tutees, who kept trying to get the tutor's attention, achieving success that adult teacher had rarely achieved.

Although the literature has nothing to say on this subject,it may be hypothesized that when a preschool age child acts as a tutor, a child of their age will probably not be able to distance themselves from the tutee as much as an older child. A younger child may not be able to assume the role as a teacher the way the older child in the Mehan study was seen to do. Instead, a preschool child performs the role of a tutor more from the perspective of being an equal; of serving as a model or a motivator to improve and help performance by providing examples and encouragement.

It should appear obvious from the preceding discussion that if teachers wish to maintain overall effectiveness, but still be able to provide individualized aid, teachers must expand their supply of instructional personnel. A viable pool of potential instructional personnel can be found within the teacher's classroom, the children themselves, even at the preschool level.

How Can Tutors and Buddies Be Used?

Numerous studies have shown the effectiveness and wide range of applications for either peer tutors and buddies; (Cohen, et. al. 1982, Fogarty and Wang, 1982, Hall, Delquadri, Greenwood, and Thurston, 1982, Zimmerman and Rosenthal, 1974). Most tutoring research has not been conducted with preschoolers, however, a few studies have shown the efficacy at the preschool level. In a study of children's individual teaching styles, Koester and Bueche (1980), successfully taught 4-year olds to teach 3-year olds a series of block design tasks. Odom, Hoyson, Jamieson, and Strain (1985) taught preschool buddy confederates to direct social initiations to handicapped preschool children. Teachers prompted the confederates to engage in social interaction with the subjects and rewarded the confederates on a token economy system. The initiation of the confederates resulted in increased frequencies of positive social interactions by the handicapped preschooler.

The development of language is another area in which nonhandicapped preschool peers can be utilized, since the frequency, length, and complexity of the non-handicapped child's verbalizations are generally greater than the handicapped child's verbal repertoire; thus it would certainly seem feasible to influence verbalizations through peer intervention (Guralnick, 1976). Guralnick had nonhandicapped preschool children model appropriate descriptions of a scene presented on a picture card in response to a request such as "tell me about the picture". During modeling sessions in which the children alternated responding to the pictures, no feedback other than general encouragement and non-evaluative comments were given. No change was

seen with this method. Next, verbal reinforcement was given to the nonhandicapped preschooler such as "Good, you're saying it the right way". The handicapped child again only received general encouragement and non-evaluative comments. But when the handicapped child produced at least six appropriate responses within the last ten trials, verbal reinforcement was given to both children. This technique produced an increased usage of target verbalizations and generalization to other verbalization was also seen. The Guralnick (1976) study shows that reinforcing a class of verbalization of a more advanced peer can result in an increase in the use of similar verbalizations in the handicapped child. It was not necessary in this instance to directly reinforce the handicapped child to obtain a change in the frequency of verbalization as might be the case in another situation. As these few studies demonstrate, the range of possible applications for preschool peer interventions is wide. However,, before nonhandicapped peers can become effective models, Devoney, Guralnick, and Rubin (1974), found that handicapped preschoolers did not imitate nonhandicapped peers until the teacher systematically structured activities to promote imitation. In most structured activities, it may be difficult to coordinate the cooperations of a very young child, a three year old, for example. Almost any type of peer interaction activity among young children may be of value to a handicapped child; Apolloni and Cooke (1975) suggest that an infant or toddler's social, verbal, and motor development skill areas present a possibility of an activity that could be organized in such a way that peers could learn from and teach one another.

The Tutor-Tutee Relationship

The research on peer-tutoring has had its main focus on the outcome of peer tutoring rather than on trying to understand the peer tutoring process. It has been suggested that the positive academic outcome could be attributed simply to additional instruction for the tutee as well as a review for the tutor. The academic outcomes of a peer-tutoring program can also at least be partically attributed to factors other than increased instruction. Other factors might include the social and motivational quality of the tutor-tutee interaction.

Gartner, Kohler, and Reissman (1971) attributed the academic gains from a peer-tutoring program to the ability of the tutor, especially a low achieving tutor, to attend to the tutee's academic and personal needs, to the special attention the tutee receiver, the availability of immediate feedback, the give and take nature of tutor-tutee work, and the opportunity to learn cooperatively. Lipitt (1976) emphasized that the tutor-tutee working relationship may become a friendship that is much closer than the relationship established between a teacher and a pupil. Gartner, et. al. (1971) is further cited as saying that in an instructional setting, the peer tutoring relationship provides a setting in which to establish a cooperative exchange between peers, a relationship that can provide a motivating influence for both tutor and tutee. These researchers have suggested that the tutoring process provides a unique opportunity to develop the tutor's sense of the social use if knowledge. Within a given skill area, a child probably has few opportunities to implement his or her skills in an interpersonal manner. In a tutoring program, a direct connection is established between the tutor's skills and their contribution to a helping

relationship. Many researchers (Robertson, 1971; Yamanoto and Klentschy, 1972; Mohan, 1972; Garbarino,1975, Allen and Feldman, 1975; and Feshbach, 1976) have placed emphasis on the import of the social and affective aspects in explaining the positive learning outcome.

Sarbin (1976) viewed the tutor as assuming a role as a friend that is first, ego oriented and second, esteem oriented. Basically, more often than not tutors are valued more for their friendship and concern that for having teacher-like esteem. The tutor's role differs from that of the classroom teacher qualitatively. A teacher must interact with an extra class, consequently their personal involvement with individual children has to be much less than the one-to-one involvement seen in a tutorial relationship. The tutor's role may be enhanced by the tutee's attitude toward the tutor. Since tutors are peers, albeit possibly older, and because a tutor lacks the expertise of a teacher, the tutee will probably not see the tutor role as being exclusively a teacher. (Sarbin 1976)

The preceding discussion attempted to emphasize the fact that tutors as well as buddies; are valuable as friends, not to the exclusion of their role as teacher-trainer, but as a major addition to that role. Their friendship quality should be an important factor in the selection and training of tutors and buddies to be addressed in the next section.

Selection of Tutors and Buddies

In selecting potential tutors and buddies, past research has shown that the characteristics of a child for their job may vary considerably. Tutors have been low achieving students (Cloward, 1967, 1976; Duff and Swick 1974),preschoolers (Apolloni, 1977; Feshback, 1976; Stokes and Baer, 1976),

learning-disabled (Epstein, 1978), mentally retarded (Snell, 1979), male or female, highly preferred or not preferred by the tutee, anticipating good or poor performance from the tutee (Conrad, 1975; Ekly and Larsen, 1977) and with or without specific types of training (Conrad, 1975). Some guidelines that should be adhered to are that the potential tutor or buddy express an interest in doing the job and that a tutor possess the skill needed in the area to be tutored (Fogarty and Wong, 1982). Potential peer interventions need to be built on peers who are dependable, showing regular attendance at preschool, who possess at least age-level play skills, age-appropriate levels of social initiations to other peers, and who have willingness to comply with teacher directions. The literature does not note this, but it would appear obvious that children who demonstrate an interest in peers with handicaps such as asking questions about the handicaps or talking with handicapped children are possibly looking for increased opportunity to work with handicapped children. In selecting tutors or buddies, teachers need to be observant of the prospective tutor's or buddy's behaviors; such as approach, avoidance, helpfulness or helplessness, and persistence when faced with a slower child, a behavior problem child, or an individual from another culture or sex, (Gerber and Kaufman, 1981). Relative to criterion such as these, a verbal, outgoing child would probably be much more likely to be successful as a tutor or buddy than a shy, withdrawn child. And even though the brothers and sisters of a child with handicaps may be more aware of a handicapped child's capabilities and limitations, the literature does not uphold the idea that these children would be good candidates for being tutors and buddies (ref.). Initially, a teacher may want to use only

the brightest children to act as tutors but to do so is to overlook most of the rest of the class. The tutoring process involves a review of the material for the tutor and the responsibility of being in an authority position may increase the self-esteem and self confidence of the tutor, (Cohen, et. al. 1982). The job of being a tutor does not necessitate using only the brightest students. The selection of a "problem" child to be given such an important task in the eyes of the tutee and other peers may completely turn such a "problem" child around. But problem children should not always be selected on the assumption that they will undergo a massive change because of the tutor or buddy experience. About the only "constant" to be depended upon in selecting tutors and buddies is to use children who express a desire to do the task, who possess the necessary skills in the area to be worked on, and who are verbal and outgoing. However, a study by Gallimore, Tharp, and Speidel, (1979), found that boys from families who assigned childcare tasks to male siblings were more likely to be attentive to a male peer tutor. General classroom attentiveness was who highly correlated with attentiveness to a peer tutor and to male sibling care. Data of this nature are highly culturally dependent as all the children in their study were either Hawaiian or of a mixed ethnic background of Anglo, Filipino, and Samoan. Sibling caretaking is also a significant feature of many other world societies, including some U.S. minority culture groups. So the data of this study could be highly relevant or irrelevant, depending upon the population of children at hand.

Of primary importance in the selection of tutors and buddies for any purpose is that the selection is not coerced. Volunteers should be

solicited at all times to serve as tutors and buddies. Teachers should also be sensitive about a child drawing a possible preference for a buddy or tutor of a particular sex, possibly the same sex. There are significant differences between same sex dyads and different sex dyads in a tutoring context. Fogarty and Wang (1982) found that a significantly greater proportion of verbal behavior was initiated by the tutee rather than by the tutor in same sex dyads relative to different sex dyads. In opposite sex dyads, there was a greater frequency of tutee responses to tutor questions and statements. Tutees who are the same sex as their partner or who are closer in age appear to participate on a more equal basis in a tutoring relationship. But overall, the selection of tutors and buddies is dictated by the situation the teacher faces, the type of children available and the needs of the children who are to be helped by the program.

The Training of Tutors and Buddies

Whatever the positive outcomes of a peer intervention program may be, they can not be attributed to simply pairing off children and the consequent one-on-one attention and instruction (Ellson, 1976). There is widespread belief among educators and the public at large that individualized instruction, especially in a one-to-one teaching situation, is almost infallibly effective. To assert as such is to make things much simpler than in fact they are. Any peer intervention program requires a careful and systematic arrangement of procedures and strategies, (Guralneck, 1976). To have an effective peer tutor or buddy program, the program must be evaluated against a standard or goal that the program is intended to meet. Jenkins and Jenkins (1982) recommend that such programs be designed with the primary

goal of helping children who are being tutored or assigned a buddy. Effectiveness is usually defined in terms of the extent to which these programs are successful in improving school achievement. As stated earlier, success is not guaranteed simply by placing potential tutors or buddies in close proximity to the children, handicapped or nonhandicapped, who are to receive the intervention. Being a good friend may come naturally to most kids but the ability to be an instructor certainly does not come innately; that capability must be carefully taught. In addition, when the children who are to be helped happen to have handicaps, the task of teaching or possibly of even being a friend, may seem overwhelming.

For example, children with handicaps experience social isolation and rejection by their peers, which became chronic conditions, not easily subject to spontaneous recovery or easy treatments (Strain, in press in 1984). Strain further points out that their isolation and rejection of handicapped children sets up a chain of events of limited social learning occasions, restricted access to more advanced behavior models, spontaneous peer tutoring, and encouragement for any appropriate behavior that does occur. Strain and Kerr (1984) postulated a social learning process taking place that gradually isolates the child with handicaps more and more. A typical instance could be that by not engaging in behaviors that are reinforcing to their peers (e.g. following the rules if a game, giving verbal compliments, or sharing toys), handicapped children becoming increasingly ignored and actively rejected. In not responding to peers positive social initiations, these children extinguish any further attempts by their peers to play and be friends. Handicapped, withdrawn children may

misinterpret approach behaviors by peers (seeing rough and tumble play as being physical assaults) and by not clearly communicating the intent of their own social initiations (entering a ply group without asking to join), handicapped children may come to be viewed as frightening, unpredictable individuals to be avoided, according to Strain and Kerr. And as already mentioned, when children with handicaps are not in the close proximity of nonhandicapped peers, they lose access to important models and sources of possible reinforcement.

It is clear that part of the intervention effort must focus upon improving socialization between handicapped and nonhandicapped children. The social skills of the handicapped population can e modified and improved through the use of modeling, the reinforcement of appropriate behavior, and other techniques. But the nonhandicapped child needs training in socialization also. Perhaps the most important and initial step in preparing nonhandicapped children to interact successfully with children who have handicaps is to teach the non-handicapped children about their peers with handicaps. The nonhandicapped children may want to know, in terms they can understand, why the handicapped children are the way they are, what to expect from the children with handicaps, and what to do in case something unexpected happens.

An effective and enjoyable means of educating nonhandicapped children about children with handicaps is by means of the puppet show. By using puppets, children can be taught that a child with handicaps may look and act a little different, but actually a child with handicaps is a lot like any other child in the class. The use of puppets can teach children that Bobby,

a boy with Downs Syndrome, may learn a little slower than some children, but Bobby has a best friend and a favorite kind of ice cream just like everyone else. The use of puppetry can be thought of as an"inoculation" technique to prepare nonhandicapped children so they won't be overwhelmed when they come into contact with handicapped children. A puppet show can present handicapped children and their behavior in a somewhat milder form of the real situation. If non-handicapped children can see the handicapped children is an enjoyable, nonfrightening and most importantly, educational context that is "easier to swallow and digest", they will be much better prepared for receiving handicapped children than without their preparation. An inoculation gives the body a watered-down version so that when the real disease is encountered, the body will not be overwhelmed, hence the analogy given here. To further prepare the potential tutor or buddy for working with handicapped children, an informal play setting could be arranged for allowing the children to mingle, allowing the tutors or buddies to observe the children they will be working within the classroom. An orientation session to air any questions and allay any fears the tutors or buddies may have is an excellent idea at this point. A more specific form of "inoculation" training for tutors and buddies ins the use of role playing. Osguthorpe and Harrison (1976) have included that role playing tutoring skills was important to the success of the program. During role playing sessions, a trainer or the classroom teacher will play the part of the tutee or the child to be assigned a buddy, and the tutor or buddy in training will learn how to interact successfully as a tutor or buddy. The trainer can then imitate, to some extent, the behavioral deficits and

problems that the tutor or buddy will have to deal with. Now at the same time the trainer is playing the role of a child with handicaps, he or she is still training the child learning the new role, and then the trainer must be able to talk the tutor or buddy through some typical situations that might occur. For example, if a command or request is given and the tutee does not respond, the command must be repeated with increased verbal emphasis and possible physical prompting, until stimulus control becomes effective. Anytime a command is obeyed, appropriate praise and reinforcement must be given. The subtleties of using differences in voice inflection to gain attentional control or to convey praise may not be apparent to the tutor or buddy and might have to be demonstrated and coached. A potential problem that has been seen in some tutor training has been that the tutor is a good friend and equal to the tutee and consequently the tutor has some difficulty assuming an authority role in giving commands and praising the tutee. Tutors appear to be hesitant to assume a role superior to another child and appear uncomfortable using voice inflections to convey praise of the type needed to reinforce behavior. It must be stressed that for the hour or half-hour that tutoring is done, the tutor is in charge and can give commands and "talk down" to the tutee because that is the tutor's job. However, before and after the tutoring sessions, the tutor and tutee are just good friend and on an equal basis.

Other general teaching skills which cut across a number of instructional tasks include giving clear instructions and commands, confirming correct responses, applying non-primitive corrective procedures, modeling correct and appropriate behavior, avoiding being too quick to help

or overprompting, and being a good friend before and after work as mentioned earlier. Studies have shown that children who tutor do not engage in these behaviors spontaneously. Neidermeyer (1970), found fifth and sixth graders who had received no specific tutor-training, tended to confirm correct responses given during tutoring, less than 50% of the time, rarely gave corrective feedback, and did not praise their tutees. In contrast, tutors who had received training in these behaviors exhibited high rates of appropriate instructional behavior. Research that has been conducted on the teaching style of children has indicated that great differences exist among youngsters in their delivery of positive and negative consequences during instruction. Fechback (1975) has noted that a child's tendency to provide positive or negative feedback to another child in the form of verbal and nonverbal cues is related to factors such as the tutor's socioeconomic class, race, mother's reinforcement style, and cognitive-achievement competence. Koester and Bueche (1980) found that among 3 and 4 year olds, demonstration of a task at hand was the most frequently used teaching method, followed by assistance and explanatory methods respectively. their study also found that males used correction more than females. So it would appear that some children may approach the tutoring role with interpersonal and social skills, while other children will necessitate specific training and supervision to prevent negative learning conditions from arising which might interfere with learning but also make the tutor-buddy experience a negative experience for all children involved.

In addition to these skills, Jenkins, and Jenkins (1982) suggest that to increase efficiency, tutors could be trained in gathering and replacing

work materials, time allocation, measuring and recording student performance, and possibly monitoring and participating in post-tutoring game activities that the tutee or buddy may have earned. However, the extent to which preschoolers can be expected to be material and time managers is no doubt limited in practicality and may be exceeding the proper role of peer tutors or buddies.

In a specific form of training for buddies, Odom et. al (1985), taught three non-handicapped preschool children (termed confederates) to direct specific types of social initiations to handicapped children. The social initiations were basically to engage in sharing and play organization responses. These social initiations resulted in an increase in the frequency of positive social interactions between the subjects and the confederates. Teacher prompting and reinforcement was needed to maintain imitations and interactions. With any peer program, the tutors and buddies must be adequately reinforced to maintain good work or they will lose desire to be a tutor or buddy. Teacher praise may be enough to insure adequate performance by tutors and buddies but other reinforcement measures might be needed. A token economy could be implemented. Stickers are effective reinforcers, or special privileges such as being let out first for recess or lunch could prove very desireable and reinforcing to tutors and buddies. Careful observation of a child's behavior and talking to a child's parents could reveal a lot about subtle events that might be overlooked but that could serve as potent reinforcers for a particular child. Keeping a tutor or buddy motivated may not have to be a test of a teacher's creativity, but

creative thinking and careful observation could supply more and novel reinforcers to keep tutors and buddies performing well.

Conclusions

Children who have learning disabilities, behavior problems, sensory and/or motor handicaps, or mental retardation all have one major factor in common. These children learn basic academic and social skills at a slower pace than their peers who are not handicapped. Thus from one point of view, children with handicaps can be compared to children from impoverished environments who have not had the same amount of exposure to a properly educating environment. A classroom teacher can conceivably compensate for either educational deficits experienced by the child from the deprived environment or for the child with handicaps. the teacher can, conceivably, that is, if he or she has the time. Of course, in a classroom, a teacher can not afford to spend all the time with just one child and it is a rare child who can have exclusive access to an instructor privately. Thus exists the rationale presented for peer tutoring and buddy system in the preceding discussions. The use of a child's peers can supplement the time a teacher can spend with any one child but can also teach social knowledge and develop friendship skills that a teacher can't do. The use of peers is to use a wider aspect of a child's naturally educating environment to which no child should be denied access. Peers have been shown to be effective agents of change in many spheres, but much more and should be done.

References

Bausell, R. B., Moody, W. B. & Walzl, F. N. (1972). A factorial study of tutoring versus classroom instruction. American Educational Research Journal, 9, 591-597.

Cohen, P. A., Kulik, J. A., & Kulik, C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. American Educational Research Journal, 19, 237-248.

Gerber, M. & Kauffman, J. M. (1981). Peer tutoring in academic settings. In P. S. Stram (Ed.), The Utilization of Classroom Peers as Behavior Agents (pp 155-187). New York: Plenum Press.

Lancioni, G. E. (1982). Normal children as tutors to teach social responses to withdrawn mentally retarded schoolmates: Training maintenance and generalization. Journal of Applied Behavior Analysis, 15, 17-40.

Musatti, T. (1986). Early peer relations: The perspectives of Piaget and Vygotsky. In E. C. Mueller & C.R. Cooper (Eds.), Process and Outcome in Peer Relationships (pp 25-53). New York: Academic Press.

Synder, L., Apolloni, T., & Cooke, T. P. (1977). Integrated settings at the early childhood level: The role of mainstreamed peers. Exceptional Children, 2, 262-266.